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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,942	12/13/2001	Bradley Paul Barber	37310-000178	1470
7590 08/25/2004			EXAMINER	
James H. Beusse Beusse Brownlee Wolter Mora & Maire, P.A. 390 N. Orange Ave., Suite 2500 Orlando, FL 32801			ALANKO, ANITA KAREN	
			ART UNIT	PAPER NUMBER
			1765	
			DATE MAILED: 08/25/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
		/				
Office Action Summary	10/017,942	BARBER ET AL.				
Office Action Summary	Examiner	Art Unit				
The MAILING DATE of this communication app	Anita K Alanko	1765				
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 6/28/	04, 5/19/04 amdt.					
2a) ☑ This action is <b>FINAL</b> . 2b) ☐ This action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) ☐ Claim(s) 1.5 and 7-13 is/are pending in the approach 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) 8-12 is/are allowed. 6) ☐ Claim(s) 1.5.7 and 13 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration.					
Application Papers						
9)⊠ The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priori	s have been received. s have been received in Application ity documents have been received (PCT Rule 17.2(a)).	on No ed in this National Stage				
Attachment(s)	-					
1) Notice of References Cited (PTO-892)	4) Interview Summary					
Notice of Draftsperson's Patent Drawing Review (PTO-948)     Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)     Paper No(s)/Mail Date  I.S. Patent and Trademark Office	Paper No(s)/Mail Da 5)  Notice of Informal Pa 6)  Other:	atent Application (PTO-152)				

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# Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the specification lacks explicit basis for the amended claim language in claim 1 of "the raised ridges formed so as to have a height extending above the cap wafer surface".

### Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 5, 7 and 13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The amended claim 1 language "the raised ridges formed so as to have a height extending above the cap wafer surface" is new matter. There is no description of providing a cap wafer surface and then lithographically forming raised ridges so as to have a height extending above the cap wafer surface. Particularly with respect to claim 13, there is no description of how a surface can be etched, i.e. material removed, and also, at the same time or as a result of the etching, form raised ridges that extend higher than the original surface.

Claims 1, 5, 7 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear how a surface can be both lithographically processed or etched, and at the same time have ridges that are higher than the original surface.

### Claim Objections

Claim 13 is objected to because of the following informalities: in claim 13, last line, the term "the cap wafer surface" lacks proper antecedent basis. A complete reading of the claim renders the term understandable in that the cap wafer surface is not the same surface as cited in claim 1, rather it is a surface that has been etched. Applicant could amend the term to cite - -the etched cap wafer surface - - to overcome this objection. Appropriate correction is required.

# Allowable Subject Matter

Claims 8-12 are allowed over the prior art.

#### Response to Arguments

Applicant's arguments filed May 19, 2004 have been fully considered, but they are not persuasive. The amendment raises issues of new matter and indefiniteness. The prior art rejections are withdrawn because they do not teach the new amended limitations.

Applicant argues that the applied art fails to teach the new claim limitation of "the raised ridges formed so as to have a height extending above the cap wafer surface". This claim language is confusing because if a surface is etched, then it is unclear how material can also be

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added to form a higher surface. Applicant's method of forming ridges is the same as the applied art—that of etching the surface. The ridges are formed contiguously with the wafer surface (see Figure 3b of the instant invention which is substantially the same as Figure 6 of Warfield). The wafer surface is recessed as a result of the etching, which forms raised ridges relative to the etched surface. However, this is not what is cited in the claims as amended.

#### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anita K Alanko whose telephone number is 571-272-1458. The examiner can normally be reached on Mon, Tues & Fri: 8:30 am-5 pm; Wed&Thurs:10 am-2 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton can be reached on 571-272-1465. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Anita K. Hanko Anita K Alanko Primary Examiner Art Unit 1765